

⊕ Feature

- Ceramic body and wire wound construction provide high SRFs.
- Exceptional Q values even at high frequencies.

⊕ Applications

- RF products for cellular phone.
- GPS receiver.
- Wireless LAN/ mouse/ keyboard/ earphone.

⊕ Product Identification :

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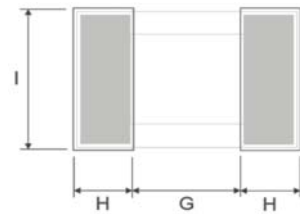
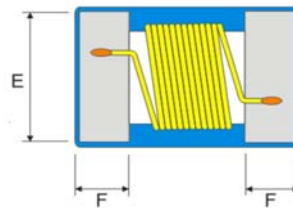
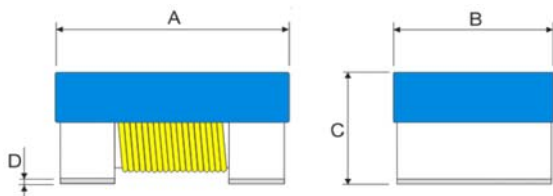
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Series name	Dimensions(LxWxH)		Internal code
WCC	0402	1.19*0.66*0.64mm	S = Standard
	0805	2.29*1.73*1.52mm	
	1210	3.5*2.9*2.25mm	

Inductance		Tolerance	
10N	10 nH	G	2%
R10	100 nH	J	5%
1R0	1000 nH	K	10%

⊕ Shapes And Dimensions

⊕ Recommended PCB Pattern

Part No.	Dimensions(mm)									
	A	B	C	D	E	F	G	H	I	
WCC0402(1005)	1.19	0.70	0.64	0.20	0.50	0.20	0.50	0.35	0.66	
	Max	Max	Max	Typ	±0.05	±0.05	Ref	Ref	Ref	
WCC0603(1608)	1.80	1.12	1.00	0.20	0.75	0.32	0.64	0.64	1.02	
	Max	Max	Max	Typ	±0.05	±0.05	Ref	Ref	Ref	
WCC0805(2012)	2.29	1.73	1.52	0.20	1.25	0.44	0.76	1.02	1.78	
	Max	Max	Max	Typ	±0.05	±0.05	Ref	Ref	Ref	
WCC1008(2520)	2.92	2.80	2.23	0.20	2.00	0.50	1.27	1.02	2.54	
	Max	Max	Max	Typ	±0.05	±0.05	Ref	Ref	Ref	
WCC1210(3225)	3.50	2.90	2.25	0.20	1.55	0.50	1.78	1.02	2.54	
	Max	Max	Max	Typ	±0.05	±0.05	Ref	Ref	Ref	

⊕ Equivalent Circuit Schematic :

⊕ Material List :

No.	Location	Material
1	Core	Ceramic Core
2	Wire	Grade1 P180
3	Solder	Sn99.3 Cu0.7
4	Epoxy	Ultraviolet epoxy resin

1.Operating temperature -40°C ~ +125°C

2.Storage conditions -40°C ~ +125°C

⊕ Electrical Characteristics :

Part No.	Inductance (nH)	DCR (Ω) Max	I _{rms} (mA) Max	SRF (GHz) Min	Q Min	Test Frequency (MHz)
WCC0402S-1N0K	1 ±10%	0.045	1360	12.70	16	250
WCC0402S-1N2K	1.2 ±10%	0.090	740	12.90	12	250
WCC0402S-1N3K	1.3 ±10%	0.140	640	12.90	10	250
WCC0402S-1N4K	1.4 ±10%	0.130	740	6.00	10	250
WCC0402S-1N5K	1.5 ±10%	0.140	640	12.90	10	250
WCC0402S-1N8K	1.8 ±10%	0.070	1040	12.00	20	250
WCC0402S-1N9K	1.9 ±10%	0.070	1040	11.30	20	250
WCC0402S-2N0K	2 ±10%	0.070	1040	11.10	23	250
WCC0402S-2N2K	2.2 ±10%	0.070	960	10.80	22	250
WCC0402S-2N4K	2.4 ±10%	0.068	790	10.50	22	250
WCC0402S-2N7J	2.7 ±5%	0.120	640	10.40	16	250
WCC0402S-3N0J	3 ±5%	0.066	840	7.00	24	250
WCC0402S-3N3J	3.3 ±5%	0.066	840	7.00	24	250
WCC0402S-3N6J	3.6 ±5%	0.066	840	6.80	24	250
WCC0402S-3N9J	3.9 ±5%	0.076	840	6.00	24	250
WCC0402S-4N3J	4.3 ±5%	0.091	700	6.00	22	250
WCC0402S-4N7J	4.7 ±5%	0.130	640	4.77	20	250
WCC0402S-5N1J	5.1 ±5%	0.083	800	4.80	23	250
WCC0402S-5N6J	5.6 ±5%	0.083	760	4.80	25	250
WCC0402S-6N2J	6.2 ±5%	0.083	760	4.80	25	250
WCC0402S-6N6J	6.6 ±5%	0.080	680	4.80	24	250
WCC0402S-6N8J	6.8 ±5%	0.083	680	4.80	24	250
WCC0402S-7N3J	7.3 ±5%	0.100	680	4.80	25	250
WCC0402S-7N5J	7.5 ±5%	0.100	680	4.80	25	250
WCC0402S-8N2J	8.2 ±5%	0.100	680	4.40	25	250
WCC0402S-8N7J	8.7 ±5%	0.200	480	4.10	25	250
WCC0402S-9N0J	9 ±5%	0.100	680	4.16	25	250
WCC0402S-9N1J	9.1 ±5%	0.100	680	4.16	25	250
WCC0402S-9N5J	9.5 ±5%	0.200	480	4.00	24	250
WCC0402S-10NJ	10 ±5%	0.200	480	3.90	24	250
WCC0402S-11NJ	11 ±5%	0.120	640	3.68	26	250
WCC0402S-12NJ	12 ±5%	0.120	640	3.60	26	250
WCC0402S-13NJ	13 ±5%	0.210	440	3.45	24	250
WCC0402S-15NJ	15 ±5%	0.170	560	3.28	26	250
WCC0402S-16NJ	16 ±5%	0.220	560	3.10	25	250
WCC0402S-18NJ	18 ±5%	0.230	420	3.10	25	250
WCC0402S-19NJ	19 ±5%	0.200	480	3.04	26	250
WCC0402S-20NJ	20 ±5%	0.250	420	3.00	26	250
WCC0402S-22NJ	22 ±5%	0.300	400	2.80	25	250
WCC0402S-23NJ	23 ±5%	0.300	400	2.72	25	250
WCC0402S-24NJ	24 ±5%	0.300	400	2.70	25	250
WCC0402S-27NJ	27 ±5%	0.300	400	2.48	25	250
WCC0402S-30NJ	30 ±5%	0.350	400	2.35	25	250
WCC0402S-33NJ	33 ±5%	0.400	400	2.35	24	250
WCC0402S-36NJ	36 ±5%	0.440	320	2.32	25	250

⊕ Electrical Characteristics :

Part No.	Inductance (nH)	DCR (Ω) Max	I _{rms} (mA) Max	SRF (GHz) Min	Q Min	Test Frequency (MHz)
WCC0402S-39NJ	39 ±5%	0.550	200	2.10	25	250
WCC0402S-40NJ	40 ±5%	0.650	320	2.24	24	250
WCC0402S-43NJ	43 ±5%	0.810	150	2.03	25	250
WCC0402S-47NJ	47 ±5%	0.830	150	2.10	25	250
WCC0402S-51NJ	51 ±5%	0.820	100	1.75	25	250
WCC0402S-56NJ	56 ±5%	0.970	100	1.76	25	250
WCC0402S-58NJ	58 ±5%	0.970	100	1.76	25	250
WCC0402S-62NJ	62 ±5%	1.120	100	1.62	25	250
WCC0402S-68NJ	68 ±5%	1.550	100	1.62	25	250
WCC0402S-72NJ	72 ±5%	1.550	50	1.26	25	250
WCC0402S-75NJ	75 ±5%	1.550	50	1.26	25	250
WCC0402S-82NJ	82 ±5%	1.550	50	1.26	25	250
WCC0402S-91NJ	91 ±5%	2.000	30	1.16	24	250
WCC0402S-R10J	100 ±5%	2.000	30	1.16	24	250
WCC0402S-R12J	120 ±5%	2.200	30	1.10	24	250
WCC0402S-R15J	150 ±5%	3.500	30	1.00	24	250

⊕ Electrical Characteristics :

Part No.	Inductance (nH)	DCR (Ω) Max	I _{rms} (mA) Max	SRF (MHz) Min	Q Min	Test Frequency (MHz)
WCC0603S-1N5K	1.5 ±10%	0.03	700	12500	24	250
WCC0603S-1N6K	1.6 ±10%	0.03	700	12500	24	250
WCC0603S-1N8K	1.8 ±10%	0.045	700	12500	16	250
WCC0603S-2N0K	2 ±10%	0.25	100	12500	12	250
WCC0603S-2N2K	2.2 ±10%	0.25	100	12500	12	250
WCC0603S-2N7K	2.7 ±10%	0.045	700	5900	22	250
WCC0603S-3N3J	3.3 ±5%	0.045	700	5900	22	250
WCC0603S-3N6J	3.6 ±5%	0.063	700	5900	22	250
WCC0603S-3N9J	3.9 ±5%	0.08	700	6900	22	250
WCC0603S-4N3J	4.3 ±5%	0.063	700	5900	22	250
WCC0603S-4N7J	4.7 ±5%	0.116	700	5800	20	250
WCC0603S-5N1J	5.1 ±5%	0.14	700	5700	20	250
WCC0603S-5N6J	5.6 ±5%	0.075	700	4760	26	250
WCC0603S-6N2J	6.2 ±5%	0.14	700	5700	20	250
WCC0603S-6N3J	6.3 ±5%	0.14	700	5700	20	250
WCC0603S-6N8J	6.8 ±5%	0.11	700	5800	27	250
WCC0603S-7N5J	7.5 ±5%	0.106	700	4800	28	250
WCC0603S-8N0J	8 ±5%	0.109	700	4700	28	250
WCC0603S-8N2J	8.2 ±5%	0.115	700	4200	30	250
WCC0603S-8N7J	8.7 ±5%	0.109	700	4600	28	250
WCC0603S-9N1J	9.1 ±5%	0.125	700	5400	28	250
WCC0603S-9N5J	9.5 ±5%	0.125	700	5400	28	250
WCC0603S-10NJ	10 ±5%	0.13	700	4800	31	250
WCC0603S-11NJ	11 ±5%	0.13	700	4000	30	250
WCC0603S-12NJ	12 ±5%	0.13	700	4000	35	250
WCC0603S-13NJ	13 ±5%	0.13	700	4000	35	250

⊕ Electrical Characteristics :

Part No.	Inductance (nH)	DCR (Ω) Max	I _{rms} (mA) Max	SRF (MHz) Min	Q Min	Test Frequency (MHz)
WCC0603S-15NJ	15 ±5%	0.17	700	4000	35	250
WCC0603S-16NJ	16 ±5%	0.17	700	3300	34	250
WCC0603S-18NJ	18 ±5%	0.17	700	3100	35	250
WCC0603S-20NJ	20 ±5%	0.18	700	3000	36	250
WCC0603S-22NJ	22 ±5%	0.19	700	3000	38	250
WCC0603S-23NJ	23 ±5%	0.19	700	3000	38	250
WCC0603S-24NJ	24 ±5%	0.135	700	2650	36	250
WCC0603S-27NJ	27 ±5%	0.22	600	2800	40	250
WCC0603S-30NJ	30 ±5%	0.22	600	2250	37	250
WCC0603S-33NJ	33 ±5%	0.22	600	2300	40	250
WCC0603S-36NJ	36 ±5%	0.25	600	2080	37	250
WCC0603S-39NJ	39 ±5%	0.25	600	2200	40	250
WCC0603S-43NJ	43 ±5%	0.28	600	2000	38	250
WCC0603S-47NJ	47 ±5%	0.28	600	2000	38	200
WCC0603S-51NJ	51 ±5%	0.27	600	1900	35	200
WCC0603S-56NJ	56 ±5%	0.31	600	1900	38	200
WCC0603S-60NJ	60 ±5%	0.33	600	1800	37	200
WCC0603S-62NJ	62 ±5%	0.33	600	1800	37	200
WCC0603S-68NJ	68 ±5%	0.34	600	1700	37	200
WCC0603S-72NJ	72 ±5%	0.49	400	1700	34	150
WCC0603S-75NJ	75 ±5%	0.52	400	1700	28	150
WCC0603S-82NJ	82 ±5%	0.54	400	1700	34	150
WCC0603S-85NJ	85 ±5%	0.58	400	1700	34	150
WCC0603S-91NJ	91 ±5%	0.58	400	1600	28	150
WCC0603S-R10J	100 ±5%	0.58	400	1400	34	150
WCC0603S-R11J	110 ±5%	0.61	300	1350	32	150
WCC0603S-R12J	120 ±5%	0.65	300	1300	32	150
WCC0603S-R13J	130 ±5%	0.92	290	1150	32	150
WCC0603S-R135J	135 ±5%	0.92	290	990	32	150
WCC0603S-R15J	150 ±5%	0.92	280	990	28	150
WCC0603S-R16J	160 ±5%	1.25	280	990	28	150
WCC0603S-R18J	180 ±5%	1.25	240	990	25	100
WCC0603S-R20J	200 ±5%	1.98	200	900	25	100
WCC0603S-R215J	215 ±5%	2.1	200	900	25	100
WCC0603S-R22J	220 ±5%	2.1	200	900	25	100
WCC0603S-R24J	240 ±5%	2.2	200	900	25	100
WCC0603S-R25J	250 ±5%	2.55	120	882	25	100
WCC0603S-R27J	270 ±5%	2.16	170	830	26	100
WCC0603S-R29J	290 ±5%	3.2	100	800	25	100
WCC0603S-R30J	300 ±5%	2.5	100	790	25	100
WCC0603S-R33J	330 ±5%	3.89	100	790	25	100
WCC0603S-R39J	390 ±5%	4.35	100	780	25	100
WCC0603S-R47J	470 ±5%	4.5	100	700	25	100
WCC0603S-R56J	560 ±5%	5	90	460	23	100

⊕ Electrical Characteristics :

Part No.	Inductance (nH)	DCR (Ω) Max	I _{rms} (mA) Max	SRF (MHz) Min	Q Min	Test Frequency (MHz)
WCC0805S-2N2K	2.2 \pm 10%	0.06	800	7900	50@1GHz	250
WCC0805S-2N7K	2.7 \pm 10%	0.06	800	7900	50@1GHz	250
WCC0805S-2N8K	2.7 \pm 10%	0.06	800	7900	40@1.5GHz	250
WCC0805S-2N9K	2.9 \pm 10%	0.06	800	7900	40@1.5GHz	250
WCC0805S-3N0K	3 \pm 10%	0.06	800	7900	40@1.5GHz	250
WCC0805S-3N3K	3.3 \pm 10%	0.08	600	7900	40@1.5GHz	250
WCC0805S-3N6K	3.6 \pm 10%	0.1	200	7900	20@1GHz	250
WCC0805S-3N9K	3.9 \pm 10%	0.11	150	7900	20@1GHz	250
WCC0805S-4N7K	4.7 \pm 10%	0.08	600	6200	35@1GHz	250
WCC0805S-5N1K	5.1 \pm 10%	0.08	600	6200	50@1GHz	250
WCC0805S-5N6J	5.6 \pm 5%	0.08	600	5900	65@1GHz	250
WCC0805S-6N2J	6.2 \pm 5%	0.08	600	5900	65@1GHz	250
WCC0805S-6N8J	6.8 \pm 5%	0.11	600	5600	50@1GHz	250
WCC0805S-7N5J	7.5 \pm 5%	0.14	600	4800	50@1GHz	250
WCC0805S-8N2J	8.2 \pm 5%	0.12	600	4400	50@1GHz	250
WCC0805S-9N1J	9.1 \pm 5%	0.1	600	4300	60@500MHz	250
WCC0805S-10NJ	10 \pm 5%	0.1	600	4300	60@500MHz	250
WCC0805S-12NJ	12 \pm 5%	0.15	600	4000	50@500MHz	250
WCC0805S-15NJ	15 \pm 5%	0.17	600	3200	50@500MHz	250
WCC0805S-16NJ	16 \pm 5%	0.17	600	3200	50@500MHz	250
WCC0805S-18NJ	18 \pm 5%	0.2	600	3100	50@500MHz	250
WCC0805S-20NJ	20 \pm 5%	0.22	500	2600	55@500MHz	250
WCC0805S-22NJ	22 \pm 5%	0.22	500	2600	55@500MHz	250
WCC0805S-23NJ	23 \pm 5%	0.22	500	2400	50@500MHz	250
WCC0805S-24NJ	24 \pm 5%	0.22	500	2400	50@500MHz	250
WCC0805S-25NJ	25 \pm 5%	0.22	500	2450	50@500MHz	250
WCC0805S-27NJ	27 \pm 5%	0.25	500	2580	55@500MHz	250
WCC0805S-30NJ	30 \pm 5%	0.25	500	2400	55@500MHz	250
WCC0805S-33NJ	33 \pm 5%	0.27	500	2150	60@500MHz	250
WCC0805S-36NJ	36 \pm 5%	0.27	500	1900	55@500MHz	250
WCC0805S-39NJ	39 \pm 5%	0.29	500	1850	60@500MHz	250
WCC0805S-43NJ	43 \pm 5%	0.34	500	1800	60@500MHz	200
WCC0805S-47NJ	47 \pm 5%	0.31	500	1700	60@500MHz	200
WCC0805S-50NJ	50 \pm 5%	0.34	500	1650	60@500MHz	200
WCC0805S-56NJ	56 \pm 5%	0.34	500	1600	60@500MHz	200
WCC0805S-62NJ	62 \pm 5%	0.36	500	1450	60@500MHz	200
WCC0805S-64NJ	64 \pm 5%	0.38	500	1500	60@500MHz	200
WCC0805S-66NJ	66 \pm 5%	0.38	500	1500	60@500MHz	200
WCC0805S-68NJ	68 \pm 5%	0.38	500	1500	60@500MHz	200
WCC0805S-75NJ	78 \pm 5%	0.4	450	1400	60@500MHz	150
WCC0805S-78NJ	75 \pm 5%	0.4	450	1400	60@500MHz	150
WCC0805S-82NJ	82 \pm 5%	0.42	400	1330	65@500MHz	150
WCC0805S-91NJ	91 \pm 5%	0.48	400	1330	65@500MHz	150
WCC0805S-92NJ	92 \pm 5%	0.48	400	1330	65@500MHz	150
WCC0805S-R10J	100 \pm 5%	0.46	400	1250	65@500MHz	150

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Part No.	Inductance (nH)	DCR (Ω) Max	Irms (mA) Max	SRF (MHz) Min	Q Min	Test Frequency (MHz)
WCC0805S-R11J	110 ±5%	0.48	400	1100	50@250MHz	150
WCC0805S-R12J	120 ±5%	0.51	400	1100	50@250MHz	150
WCC0805S-R14J	140 ±5%	0.56	400	920	50@250MHz	100
WCC0805S-R15J	150 ±5%	0.56	400	920	50@250MHz	100
WCC0805S-R16J	160 ±5%	0.6	400	920	50@250MHz	100
WCC0805S-R18J	180 ±5%	0.64	400	920	50@250MHz	100
WCC0805S-R20J	200 ±5%	0.68	400	860	50@250MHz	100
WCC0805S-R215J	215 ±5%	0.7	400	820	50@250MHz	100
WCC0805S-R22J	220 ±5%	0.7	400	820	50@250MHz	100
WCC0805S-R24J	240 ±5%	1	350	770	44@250MHz	100
WCC0805S-R25J	250 ±5%	1.2	350	750	45@250MHz	100
WCC0805S-R27J	270 ±5%	1	350	730	48@250MHz	100
WCC0805S-R28J	280 ±5%	1.35	350	550	48@250MHz	100
WCC0805S-R29J	290 ±5%	1.4	310	450	48@250MHz	150
WCC0805S-R30J	300 ±5%	1.4	310	450	48@250MHz	150
WCC0805S-R33J	330 ±5%	1.4	310	650	48@250MHz	100
WCC0805S-R36J	360 ±5%	1.45	300	630	48@250MHz	100
WCC0805S-R39J	390 ±5%	1.5	290	600	48@250MHz	100
WCC0805S-R42J	420 ±5%	1.7	250	425	33@100MHz	50
WCC0805S-R43J	430 ±5%	1.7	250	425	33@100MHz	50
WCC0805S-R47J	470 ±5%	1.76	250	375	33@100MHz	50
WCC0805S-R56J	560 ±5%	1.9	230	330	23@50MHz	25
WCC0805S-R62J	620 ±5%	2.2	210	320	23@50MHz	25
WCC0805S-R68J	680 ±5%	2.2	190	310	23@50MHz	25
WCC0805S-R75J	750 ±5%	2.3	180	310	23@50MHz	25
WCC0805S-R82J	820 ±5%	2.35	180	310	23@50MHz	25
WCC0805S-R88J	880 ±5%	2.35	180	310	23@50MHz	25
WCC0805S-R91J	910 ±5%	2.45	170	250	22@50MHz	25
WCC0805S-1R0J	1000 ±5%	2.5	170	220	20@50MHz	25
WCC0805S-1R2J	1200 ±5%	2.9	150	180	20@25MHz	25
WCC0805S-1R5J	1500 ±5%	3.3	150	160	20@25MHz	25
WCC0805S-1R6J	1600 ±5%	3.4	150	140	20@25MHz	25
WCC0805S-1R8J	1800 ±5%	3.5	120	130	20@25MHz	25
WCC0805S-2R2J	2200 ±5%	4.5	120	100	20@25MHz	25
WCC0805S-2R7J	2700 ±5%	4.8	100	80	18@25MHz	25
WCC0805S-3R0J	3000 ±5%	5	60	60	18@25MHz	25
WCC0805S-3R3J	3300 ±5%	6.8	50	50	18@25MHz	25
WCC0805S-4R7J	4700 ±5%	7	30	40	18@25MHz	25

⊕ Electrical Characteristics :

Part No.	Inductance (nH)	DCR (Ω) Max	Irms (mA) Max	SRF (MHz) Min	Q Min	Test Frequency (MHz)
WCC1008S-3N9K	3.9 ±5%	0.08	1000	4100	50@500MHz	50
WCC1008S-4N7K	4.7 ±5%	0.08	1000	4100	50@500MHz	50
WCC1008S-5N6K	5.6 ±5%	0.2	650	4100	30@500MHz	50
WCC1008S-6N2K	6.2 ±5%	0.2	400	4100	30@500MHz	50

⊕ Electrical Characteristics :

Part No.	Inductance (nH)	DCR (Ω) Max	I _{rms} (mA) Max	SRF (MHz) Min	Q Min	Test Frequency (MHz)
WCC1008S-10NJ	10 \pm 5%	0.08	1000	4100	50@500MHz	50
WCC1008S-12NJ	12 \pm 5%	0.09	1000	3300	50@500MHz	50
WCC1008S-15NJ	15 \pm 5%	0.1	1000	2500	50@500MHz	50
WCC1008S-18NJ	18 \pm 5%	0.11	1000	2500	50@350MHz	50
WCC1008S-22NJ	22 \pm 5%	0.12	1000	2400	55@350MHz	50
WCC1008S-24NJ	24 \pm 5%	0.13	1000	1600	55@350MHz	50
WCC1008S-27NJ	27 \pm 5%	0.13	1000	1600	55@350MHz	50
WCC1008S-33NJ	33 \pm 5%	0.14	1000	1600	60@350MHz	50
WCC1008S-39NJ	39 \pm 5%	0.15	1000	1500	60@350MHz	50
WCC1008S-47NJ	47 \pm 5%	0.16	1000	1500	65@350MHz	50
WCC1008S-51NJ	51 \pm 5%	0.18	1000	1300	65@350MHz	50
WCC1008S-54NJ	54 \pm 5%	0.18	1000	1300	65@350MHz	50
WCC1008S-56NJ	56 \pm 5%	0.18	1000	1300	65@350MHz	50
WCC1008S-65NJ	65 \pm 5%	0.2	1000	1300	65@350MHz	50
WCC1008S-68NJ	68 \pm 5%	0.2	1000	1300	65@350MHz	50
WCC1008S-82NJ	82 \pm 5%	0.22	1000	1000	60@350MHz	50
WCC1008S-R10J	100 \pm 5%	0.56	650	1000	60@350MHz	25
WCC1008S-R12J	120 \pm 5%	0.63	650	950	60@350MHz	25
WCC1008S-R15J	150 \pm 5%	0.7	580	850	45@100MHz	25
WCC1008S-R18J	180 \pm 5%	0.77	620	750	45@100MHz	25
WCC1008S-R20J	200 \pm 5%	0.84	500	700	45@100MHz	25
WCC1008S-R21J	210 \pm 5%	0.84	500	700	45@100MHz	25
WCC1008S-R215J	215 \pm 5%	0.84	500	700	45@100MHz	25
WCC1008S-R22J	220 \pm 5%	0.84	500	700	45@100MHz	25
WCC1008S-R26J	260 \pm 5%	0.91	500	600	45@100MHz	25
WCC1008S-R27J	270 \pm 5%	0.91	500	600	45@100MHz	25
WCC1008S-R29J	290 \pm 5%	1.05	450	570	45@100MHz	25
WCC1008S-R30J	300 \pm 5%	1.05	450	570	45@100MHz	25
WCC1008S-R33J	330 \pm 5%	1.05	450	570	45@100MHz	25
WCC1008S-R35J	350 \pm 5%	1.12	470	500	45@100MHz	25
WCC1008S-R36J	360 \pm 5%	1.12	470	500	45@100MHz	25
WCC1008S-R39J	390 \pm 5%	1.12	470	500	45@100MHz	25
WCC1008S-R43J	430 \pm 5%	1.19	470	450	45@100MHz	25
WCC1008S-R47J	470 \pm 5%	1.19	470	450	45@100MHz	25
WCC1008S-R51J	510 \pm 5%	1.33	400	415	45@100MHz	25
WCC1008S-R54J	540 \pm 5%	1.33	400	415	45@100MHz	25
WCC1008S-R56J	560 \pm 5%	1.33	400	415	45@100MHz	25
WCC1008S-R62J	620 \pm 5%	1.4	300	375	45@100MHz	25
WCC1008S-R64J	640 \pm 5%	1.4	300	375	45@100MHz	25
WCC1008S-R68J	680 \pm 5%	1.47	400	375	45@100MHz	25
WCC1008S-R75J	750 \pm 5%	1.54	360	360	45@100MHz	25
WCC1008S-R82J	820 \pm 5%	1.61	400	350	45@100MHz	25
WCC1008S-R91J	910 \pm 5%	1.68	380	320	35@50MHz	25
WCC1008S-1R0J	1000 \pm 5%	1.75	370	290	35@50MHz	25
WCC1008S-1R2J	1200 \pm 5%	2	310	250	35@50MHz	7.9

⊕ Electrical Characteristics :

Part No.	Inductance (nH)	DCR (Ω) Max	I _{rms} (mA) Max	SRF (MHz) Min	Q Min	Test Frequency (MHz)
WCC1008S-1R5J	1500 \pm 5%	2.3	330	200	28@50MHZ	7.9
WCC1008S-1R6J	1600 \pm 5%	2.3	330	200	28@50MHZ	7.9
WCC1008S-1R8J	1800 \pm 5%	2.6	300	160	28@50MHZ	7.9
WCC1008S-2R0J	2000 \pm 5%	2.8	280	160	28@50MHZ	7.9
WCC1008S-2R2J	2200 \pm 5%	2.8	280	160	28@50MHZ	7.9
WCC1008S-2R7J	2700 \pm 5%	3.2	290	140	22@25MHz	7.9
WCC1008S-3R3J	3300 \pm 5%	3.4	290	110	22@25MHz	7.9
WCC1008S-3R9J	3900 \pm 5%	3.6	260	100	20@25MHz	7.9
WCC1008S-4R7J	4700 \pm 5%	4	260	60	20@7.9MHz	7.9
WCC1008S-5R6J	5600 \pm 5%	5.7	240	20	16@7.9MHz	7.9
WCC1008S-6R8J	6800 \pm 5%	7.7	200	40	18@7.9MHz	7.9
WCC1008S-8R2J	8200 \pm 5%	10.7	170	25	18@7.9MHz	7.9
WCC1008S-100J	10000 \pm 5%	12.7	100	25	18@7.9MHz	7.9

⊕ Electrical Characteristics :

Part No.	Inductance (nH)	DCR (Ω) Max	I _{rms} (mA) Max	SRF (MHz) Min	Q Min	Test Frequency (MHz)
WCC1210S-12NJ	12 \pm 5%	0.08	1000	3200	40@300MHZ	100
WCC1210S-15NJ	15 \pm 5%	0.20	1000	3200	40@300MHZ	100
WCC1210S-56NJ	56 \pm 5%	0.14	1000	1450	55@300MHZ	100
WCC1210S-R10J	100 \pm 5%	0.20	850	900	55@300MHZ	100
WCC1210S-R12J	120 \pm 5%	0.25	800	800	60@300MHZ	100
WCC1210S-R15J	150 \pm 5%	0.30	750	700	60@300MHZ	100
WCC1210S-R18J	180 \pm 5%	0.30	700	650	60@300MHZ	50
WCC1210S-R22J	220 \pm 5%	0.40	770	650	60@300MHZ	50
WCC1210S-R24J	240 \pm 5%	0.40	630	580	40@300MHZ	50
WCC1210S-R27J	270 \pm 5%	0.40	630	580	40@300MHZ	50
WCC1210S-R33J	330 \pm 5%	0.58	590	580	45@150MHZ	50
WCC1210S-R36J	360 \pm 5%	0.58	530	510	45@150MHZ	50
WCC1210S-R39J	390 \pm 5%	0.58	530	510	45@150MHZ	50
WCC1210S-R68J	680 \pm 5%	1.20	430	400	45@150MHZ	25
WCC1210S-1R0J	1000 \pm 5%	2.10	320	340	45@150MHZ	25
WCC1210S-1R5J	1500 \pm 5%	1.95	310	160	20@50MHZ	7.9
WCC1210S-1R8J	1800 \pm 5%	3.50	310	160	30@50MHZ	7.9
WCC1210S-2R2J	2200 \pm 5%	3.80	310	130	25@50MHZ	7.9
WCC1210S-2R7J	2700 \pm 5%	3.50	300	110	25@50MHZ	7.9
WCC1210S-3R3J	3300 \pm 5%	4.00	290	60	20@25MHZ	7.9
WCC1210S-4R7J	4700 \pm 5%	5.00	280	60	20@25MHZ	7.9
WCC1210S-5R6J	5600 \pm 5%	6.00	250	50	15@25MHZ	7.9
WCC1210S-6R8J	6800 \pm 5%	9.00	230	40	15@7.9MHZ	7.9
WCC1210S-8R2J	8200 \pm 5%	9.50	170	50	20@7.9MHZ	7.9
WCC1210S-100J	10000 \pm 5%	10.00	150	30	15@7.9MHZ	7.9

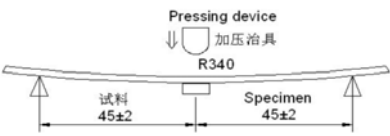
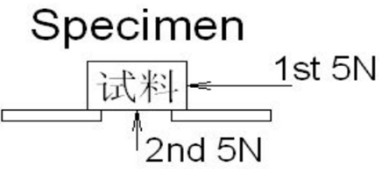
Note : Specifications which provide more details for the proper and safe use of the described product are available upon request. all specifications are subject to change without notice.

Tolerance : S \pm 0.3 ; F \pm 1% ; G \pm 2% ; J \pm 5% ; K \pm 10% ; M \pm 20%.

I_{rms} : DC Current that will cause an approximate Δ T of 40 °C

Test Instrument : LCR(CH1062/HP4284A) 、DCR(TH2511/CH502BC) 、IDC(CH1320) or equivalent.

⊕ General Characteristics

項目 Item	Conditions	Specification
温度特性 Temperature drift	在温度-40 ~ + 125°C之间测试。 To be measured in the range of -40°C to 125°C.	Inductance temperature coefficient 2000 ppm/°C or less
保存温度范围 Storage Temperature	在包装的状态下。 With taping.	- 40°C ~ + 125°C
使用温度范围 Operating Temperature	包括制品的发热温度。 Including self temperature rise.	- 40°C ~ + 125°C
弯曲测试 Bending test	<p>试件焊接在基板上，按箭头方向以大约0.5mm/秒的速度加压，直到基板变形幅度到3mm 保持30 秒。</p> <p>Apply pressure gradually in the direction of the arrow at a rate of about 0.5mm/s until bent depth reaches 3mm and hold for 30±5s.</p>  <p>基板Board: 40*100mm 厚Thickness: 1.0mm</p>	Change from an initial value L : within±10%
固着强度 Adhesion strength	<p>按箭头方向用R0.5 的加压棒在试件中施加一定的静力并保持60±5秒。</p> <p>A static load using a R0.5 pressing tool shall be applied the arrow and to the body of the specimen in the direction of the arrow and shall be hold for 60±5s. Measure after removing pressure.</p> 	Change from an initial value L : within±10%

耐振性 Vibration	<p>振动频率10~55~10Hz, 振幅1.5mm, 分X,Y,Z 方向各振动1 小时 (共3 小时) 。</p> <p>The specimen shall be subjected to a vibration of 1.5mm amplitude, sweep frequency 10~55Hz (10Hz to 55Hz to 10Hz in a period of one minute) for 1 h in each of 3(X,Y,Z) axes.</p>	Change from an initial value L : within±10%
耐冲击性 Mechanical shock	<p>利用橡胶块式落下冲击试验机，分别在3 个互相垂直的方向以981m/S² 的冲击加速度落下。</p> <p>Peak acceleration: 981 m/S² Duration of pulse: 6ms 3 times in each of 3(X,Y,Z)axes. The specimen must be fixed on test board. Three successive shock shall be applied in the perpendicular direction of each surface of the specimen.</p>	Change from an initial value L : within±10%
自然落下试验 Free fall test	<p>试件安装在基板上，并固定在重500 克的盒中，由1 米高自由落体，3 个互相垂直的方向各3 次。</p> <p>The specimen must be fixed on test board. It must be equipped with instruments of which weight is 500g. Then it shall be fallen freely from 1m height to rigid wood 3 times in each of three axes.</p>	Change from an initial value L : within±10%
焊锡附着性 Solder ability	<p>试验品的电极深布松香后，在5 ~ 10 秒内焊锡，焊锡槽温度245±5℃，时间：3±0.5 秒。</p> <p>Terminals shall be immersed for 5 to 10 seconds in flux at room temperature. Dip sample into solder bath containing molten solder at 245±5°C for 3±0.5 seconds.</p>	90%以上的面积要被覆盖。 New solder shall cover 90% minimum of the surface immersed.
耐电压 Dielectric strength	<p>在电极与磁材之间加入直流电压100V 通电时间1 分钟。</p> <p>100V DC shall be applied for 60s between the terminal and the core.</p>	没有损害。 Without damage.

<p>焊锡耐热性 Resistance to soldering heat</p>	<p>试验方法Test method 热风炉焊接Reflow soldering method 预热Preheat 150~180°C 90±30s 峰值温度Peak temp 250(+ 5,-0)°C (230°Cmin , 30±10s) 试验板的厚度0.8mm 上按上面条件通过两次热风炉。</p> <p>The specimen shall be subjected to the reflow process under the above condition 2 times.Test board shall be 0.8mm thick. Base material shall be glass epoxy resin.</p> <p>测定Measurement 常温常湿中放置于1 小时以上测试。 The specimen shall be stored at standard atmospheric conditions for 1 h in prior to the measurement.</p>	<p>Change from an initial value L : within±10%</p>
<p>绝缘抵抗 Insulation resistance</p>	<p>在电极与磁材之间加入直流电压100V。</p> <p>100V DC shall be applied between the terminal and the core.</p>	<p>100mΩ 以上 100mΩ or more.</p>
<p>耐寒性 Low temperature</p>	<p>在温度-40±3°C中放置500±12 小时后，常温常湿中放置1 小时以上2 小时以内测试。</p> <p>The specimen shall be stored at a temperature of -40 ±3°C for 500 ±12h. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement Measurement shall be made within 1h.</p>	<p>Change from an initial value L : within±10%</p>
<p>耐热性 Dry heat</p>	<p>在温度125±2°C中放置500±12 小时后，常温常湿中放置1 小时以上2 小时以内测试。</p> <p>The specimen shall be stored at a temperature of 125 ± 2°C for 500± 12h. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement. Measurement shall be made within 1h.</p>	<p>Change from an initial value L : within±10%</p>

耐湿性 Dump heat	在温度 $60\pm 2^{\circ}\text{C}$ ·湿度90~95%中放置 500 ± 12 小时后· 常温常湿中放置1小时以上2小时以内测试。 The specimen shall be stored at a temperature of $60\pm 2^{\circ}\text{C}$ with relative humidity of 90 ~ 95% for $500 \pm 2\text{h}$. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement. Measurement shall be made within 1h.	Change from an initial value L : within $\pm 10\%$
温度循环 Temperature cycle	以温度 -40°C 中放置30分钟·在 125°C 放置30分钟·中间 转换时间不超过2分钟为一个循环·完成500个循环后· 常温常湿中放置1小时以上2小时以内测试。 The specimen shall be subjected to 500 continuous cycles of temperature change of -40°C for 30 min and 125°C for 30 min with the transit period of 2min or less. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement. Measurement shall be made within 1h.	Change from an initial value L : within $\pm 10\%$

标准状态Standard atmospheric conditions

Unless otherwise specified, the standard range of atmospheric conditions in making measurements and test as follows;

Ambient temperature : 5°C to 35°C , Relative humidity: 45% to 85%, Air pressure: 86kPa to 106kPa

If more strict measurement is required, measurement shall be made within following limits;

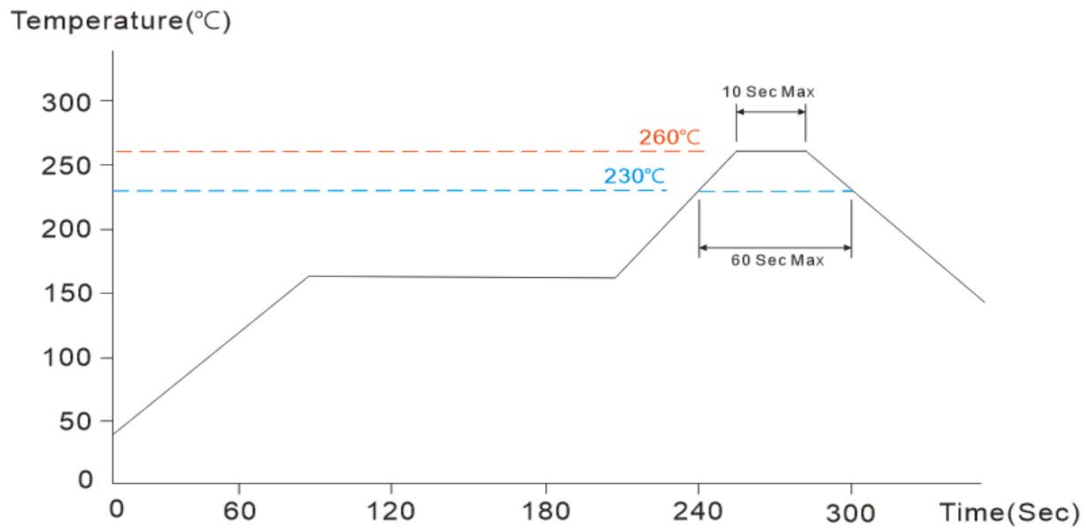
Ambient temperature : $20\pm 2^{\circ}\text{C}$, Relative humidity: $65\pm 5\%$, Air pressure: 86kPa to 106kPa

禁用物质Prohibited Substances

我公司保证我司的产品和生产过程符合“RoHS 规则”·所有产品中使用的材料均是化学物质生产规则中登记的材料。

We confirm that our products and our production process accord with "rule of RoHS". All materials used in this product are registered material under the law concerning the examination and Regulation of Manufacture of Chemical Substances.

⊕ Reflow Soldering Heat Endurance

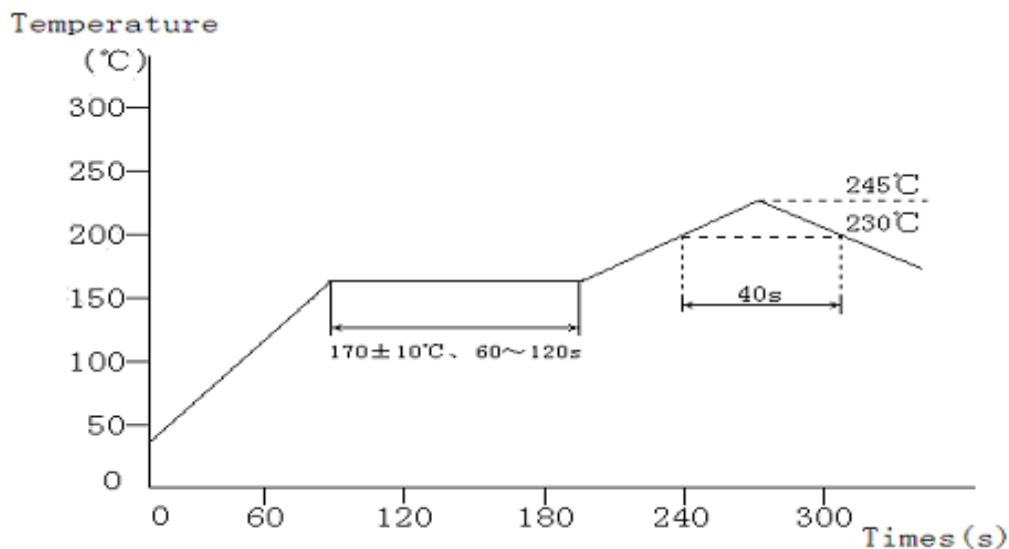


No mechanical and electrical defects are found after testing based on the above profile and keeping under the conditions of room temperature and humidity for 2 hours.

Twice reflow test is acceptable with the test interval remaining 1 hour under the normal conditions.

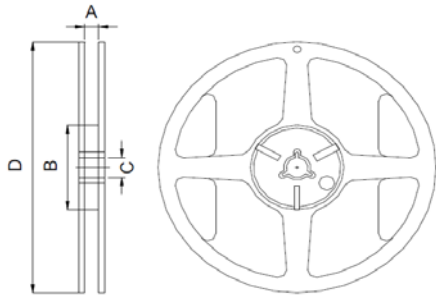
The reflow test profile may vary with the testing instruments.

⊕ Recommended Reflow Conditions

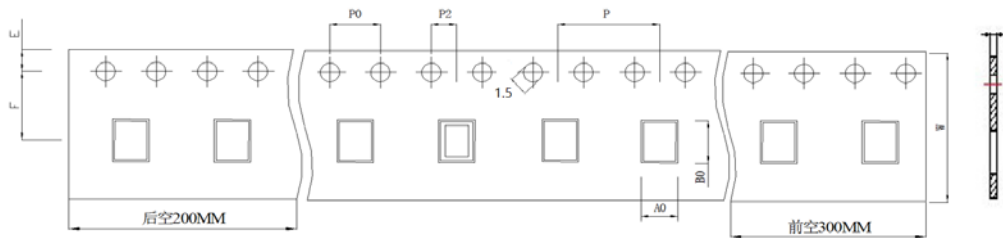


The recommended reflow profile is based on the testing instruments used. Solder ability will depend on the testing equipments, reflow conditions, testing method, etc. So it is necessary to make a confirmation of them when the reflow conditions are set up.

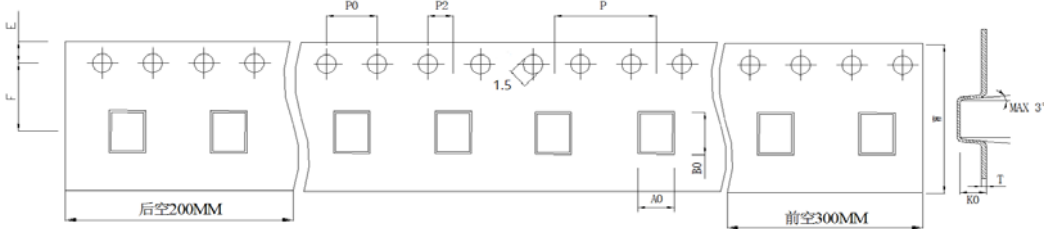
However halogen lamp shall be used, side heat will be beyond range of resistance heat, so we can't recommend it.

⊕ Reel Dimension(m/m)


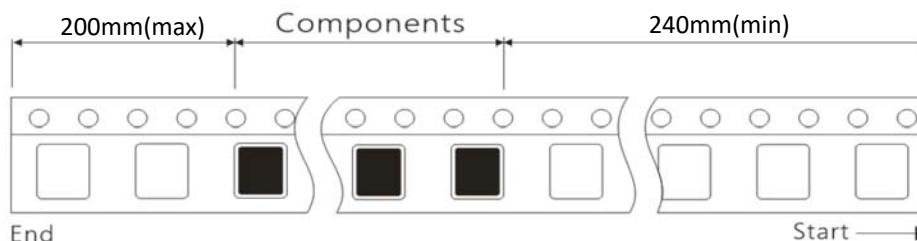
Item	A	B	C	D	Applicable Models
7"x8	8.4±1	60±1	13±1	178±1	WCC0402、WCC0603、WCC0805、WCC1008、WCC1210

⊕ Taping Dimension(m/m)


Item	W	Ao	Bo	E	F	P	P0	P2	t
WCC0402(1005)	8±0.3	0.74±0.1	1.23±0.1	1.75±0.1	3.5±0.1	2±0.1	4.0±0.1	2.0±0.1	0.8±0.05



Item	W	Ao	Bo	Ko	E	F	P	P0	P2	t
WCC0603(1608)	8±0.3	1.15±0.1	1.83±0.1	0.95±0.1	1.75±0.1	3.5±0.1	4±0.1	4.0±0.1	2.0±0.1	0.25±0.05
WCC0805(2012)	8±0.3	1.85±0.1	2.40±0.1	1.45±0.1	1.75±0.1	3.5±0.1	4±0.1	4.0±0.1	2.0±0.1	0.25±0.05
WCC1008(2520)	8±0.3	2.73±0.1	2.90±0.1	2.34±0.1	1.75±0.1	3.5±0.1	4±0.1	4.0±0.1	2.0±0.1	0.25±0.05
WCC1210(3225)	8±0.3	2.96±0.1	3.60±0.1	2.40±0.1	1.75±0.1	3.5±0.1	4±0.1	4.0±0.1	2.0±0.1	0.25±0.05

⊕ Taping method

⊕ Packaging Carton

Item	Reel Packing Unit	Inner Box Packing Unit	Carton Packing Unit
WCC0402(1005)	10,000 PCS / Reel	50,000 PCS / Box	500,000 PCS / Box
WCC0603(1608)	4,000 PCS / Reel	20,000 PCS / Box	200,000 PCS / Box
WCC0805(2012)	3,000 PCS / Reel	15,000 PCS / Box	150,000 PCS / Box
WCC1008(2520)	2,000 PCS / Reel	10,000 PCS / Box	100,000 PCS / Box
WCC1210(3225)	2,000 PCS / Reel	10,000 PCS / Box	100,000 PCS / Box

